REMARKS

Claims 28 and 30-43 are pending.

I. Claim Amendments

Claim 28 has been amended to recite a mole ratio of monomer (i) to monomer (ii) of 2-10:1. It is respectfully submitted this is supported as follows.

Page 15, lines 11-12 discloses a ratio of DMAM to DMA of about 10:1, preferably about 5:1, and more preferably about 3:1.

Example 1 at page 87 shows DMAM:DMA of 3:1.

Example 3 at page 88 shows DMAM: AA of 2:1.

Example 4 at page 88 shows DMAM:MAA of 2:1.

For purposes of this response diethylaminoethyl methacrylate is abbreviated DMAM (also abbreviated DMAEMA). The ratios are mole ratios as indicated at page 27 and the examples.

It is respectfully submitted these ratios for these specific copolymers indicates typical ratios for the entire class of copolymers of monomers (i) and (ii).

Claims 29-33 have been amended to insert commas to improve readability.

Claims 34 and 35 are objected to. They have been rewritten in independent form. It is noted that only features of Claim 28 consistent with the homopolymer of Claim 35 were added to Claim 35. Namely, monomer ii of Claim 28 was not added to Claim 35 because this would have been inconsistent with Claim 35 being directed to a homopolymer.

Claim 36 has been amended to reiterate the mole ratio of its base claim and insert a comma.

Claim 37 is amended to insert a comma.

Claim 38 is amended to recite a mole ratio of monomer (i) to monomer (ii) of 2-10:1 as is Claim 28.

New Claim 39 recites a mole ratio of 2-3:1 for DMAM: AA. It is respectfully submitted these ratios are supported by the above-listed passages cited as support for the amendment to Claim 28.

New Claims 40 and 41 are method versions of allowable composition Claims 34 and 35.

New Claims 42 and 43 are method versions of composition Claims 36 and 39.

It is respectfully submitted that no new matter or new issues requiring a search are presented by the above amendments.

II. 35 USC 102

Claims 28, 29, 32 36 and 37 stand rejected under 35 USC 102(b) as being anticipated by EP 560,519 A2. The Office action asserts the reference discloses hard surface cleaning compositions, especially automatic dishwashing detergent compositions comprising copolymers of DMAM and acrylic acid.

EP '519 at page 2, line 56 - page 3, line 19 discloses its polymer has 30 to 95 % by weight component "a" (defining a group which includes AA) and 5 to 50 % by weight of component "b" (defining a group which includes DMAM). The EP '519 copolymer having the greatest amount of DMAM, namely 50% DMAM and 50% AA. However, this results in a DMAM:AA mole ratio of (50/157):(50/72) or 0.45:1 (DMAM has a molecular weight of 157 grams per mole and AA has a molecular weight of 72 grams per mole).

In contrast, amended claim 28 recites a mole ratio of the monomer "i" (defining a group which includes DMAM) to monomer "ii" (defining a group which includes AA) from 2 to 10: 1. It is respectfully submitted these recited mole ratios distinguish over those permitted by EP '519.

Claims 36, 39, 42 and 43 further distinguish over the reference by further defining the monomers and/or ratios.

III. 35 USC 103

A. EP '519

Claims 28, 30-33, 36 and 37 stand rejected as being unparentable over EP '519. It is respectfully submitted that this rejection is overcome as is the 35 USC 102 rejection based upon this reference.

B. US 4,579,681 to Ruppert et al.

Claims 28, 30-33, 37 and 38 stand rejected as being unpatentable over Ruppert et al.

It is respectfully submitted the amended claims distinguish over Ruppert et al.

Ruppert et al., col. 2, lines 1-16, discloses:

"The vinyl caprolactam polymer is utilized in the form of a resinous substance, which may also include mixtures of the vinyl caprolactam polymer with other soil release agents. In

cases where the vinyl caprolactam polymer is composed of more than one monomer, those polymers containing between about 65 and about 95 wt % N-vinyl-e-caprolactam; between about 5 and about 35 wt % N-vinyl2-pyrrolidone and 0 to about 10 wt % dimethylaminoethyl methacrylate (DMAEMA), are most preferred. Specific examples of some preferred resins having high soil releasing properties include:

80 wt % VCL/20 wt % VP

65 wt % VCL/35 wt % VP

65 wt % VCL/30 wt % VP/5 wt % DMAEMA

80 wt % VCL/15 wt % VP/5 wt % DMAEMA

VCL homopolymer "

Thus, there is only 0 to about 10 wt % dimethylaminoethyl methacrylate (DMAEMA).

N-vinylcaprolactam has the formula $(CH_2)_5(C_2H_3)(O)N$ and thus has a molecular weight of about 127. Thus assuming 10 wt % DMAM and 90 wt % NVCL results in a DMAM:NVCL mole ratio of (10/157):(90/127) which equals 0.09:1. It is respectfully submitted the present claims, reciting mole ratio of i to ii ranges from 2 to 10: 1, avoid the small amounts of this reference.

IV. Conclusion

In view of the above, it is respectfully submitted that all objections and rejections are overcome. Hence a Notice of Allowance is respectfully requested.

Respectfully submitted,

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